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APPLICATION NO.	NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/681,245 10/09/2003		10/09/2003	Masami Nagano	. 056208.52824US 7512		
23911	7590	04/05/2005		EXAMINER		
CROWELL		RING LLP OPERTY GROUP	MOHANTY, BIBHU R			
P.O. BOX 14		OLEKTI OKOOL	ART UNIT	PAPER NUMBER		
WASHINGT	ON, DC	20044-4300	3747	-		

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>		Application	on No.	Applicant(s)					
		10/681,24		NAGANO ET AL.					
Office Action Summary		Examiner		Art Unit	· · ·				
	,	Bibhu Mo		3747					
The MAII	ING DATE of this communication				ress				
Period for Reply	MO DATE OF MIS COMMUNICATION	on appeare on an							
THE MAILING D - Extensions of time m after SIX (6) MONTH - If the period for reply - If NO period for reply - Failure to reply within Any reply received b	STATUTORY PERIOD FOR F ATE OF THIS COMMUNICAT ay be available under the provisions of 37 C IS from the mailing date of this communicati ris specified above is less than thirty (30) days ris specified above, the maximum statutory the set or extended period for reply will, by y the Office later than three months after the djustment. See 37 CFR 1.704(b).	ION. CFR 1.136(a). In no eviction. s, a reply within the state period will apply and were statute, cause the apply and were statute, cause the apply and were statute.	ent, however, may a reply be tir utory minimum of thirty (30) day ill expire SIX (6) MONTHS from lication to become ABANDONE	mely filed ys will be considered timely. It the mailing date of this come ED (35 U.S.C. § 133).	munication.				
Status									
1)⊠ Responsiv	e to communication(s) filed on	09 October 200	3.						
2a) ☐ This action		This action is n							
,	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
· ·	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Clair	ns								
4)⊠ Claim(s) <i>1</i>	-15 is/are pending in the applic	cation.							
	4a) Of the above claim(s) is/are withdrawn from consideration.								
·									
· _	Claim(s) is/are allowed. Claim(s) <u>1-4,6 and 8-15</u> is/are rejected.								
· = · · · =									
	Claim(s) <u>5 and 7</u> is/are objected to. Claim(s) are subject to restriction and/or election requirement.								
Application Papers									
	cation is objected to by the Exa	aminer							
<i>,</i> —	g(s) filed on is/are: a)		objected to by the	Examiner.					
The state of the s	ay not request that any objection								
	nt drawing sheet(s) including the o				₹ 1.121(d).				
	r declaration is objected to by t								
Priority under 35 U									
•		ion priority un	dor 25 11 5 C \$ 110/a) (d) or (f)					
a)⊠ All b)[1.⊠ Cert 2.□ Cert 3.□ Cop app	gment is made of a claim for for Some * c) None of: iffied copies of the priority docutified copies of the priority docutified copies of the priority docuties of the certified copies of the lication from the International Exched detailed Office action for	uments have bee uments have bee e priority docum Bureau (PCT Rul	en received. en received in Applicat ents have been receiv e 17.2(a)).	ion No ed in this National S	atage				
Attachment(s) 1) Notice of Reference	es Cited (PTO-892)		4) Interview Summary						
2) Notice of Draftsper	son's Patent Drawing Review (PTO-94		Paper No(s)/Mail D 5) Notice of Informal I		152)				
 Information Disclost Paper No(s)/Mail D 	sure Statement(s) (PTO-1449 or PTO/state	2R\00)	6) Other:		/				

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DETAILED ACTION

1. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

In claim 6, lines 6-7, it is unclear how "the above cross-sectional area" is different from the "cross-sectional area" referred to in lines 2-3. It appears that the same cross-sectional area is being referenced in both cases.

The claim is examined to the extent understood.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6, 9-11 are rejected under 35 U.S.C. 102(a, e) as being anticipated by Sukegawa US Patent 6,776,142.

Sukegawa has disclosed the invention as claimed showing a fuel supply system with an air intake pipe (23), a throttle (21), a downstream fuel injection valve (12), a bypass air intake passage (31), a fuel vaporizing section branch (35) with a heater, and

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a vaporized-fuel distribution passage (18) which connects the branch (35) to an opening in the air intake pipe (23) downstream of the throttle valve.

With regard to claims 9-10, note that the valve (32) and controller (50) are used to control air flow through the bypass passage.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa US Patent 6,776,142.

Sukegawa has disclosed the invention substantially as claimed (see ppgh. 1 above). However, Sukegawa does not show the use of an air intake passage made of resin.

The Examiner takes Official Notice that resin is well known in the art to be a material with the advantage of low cost manufacture.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sukegawa to use resin to make the air intake passage, or any other desired component for the known advantage of low cost manufacture known in the art.

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With regards to claims 12-15 it would have been obvious to modify the number and timing of the fuel injections based on the measured crank angle and engine temperature to obtain better fuel efficiency as this is considered known in the art.

- 4. Claims 5, 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bibhu Mohanty whose telephone number is 703 308-3706. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 703 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308-7766 for regular communications and 703 308-7766 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3310.

Bibhu Mohanty Primary Examiner Art Unit 3747

brm April 1, 2005